Ch 12

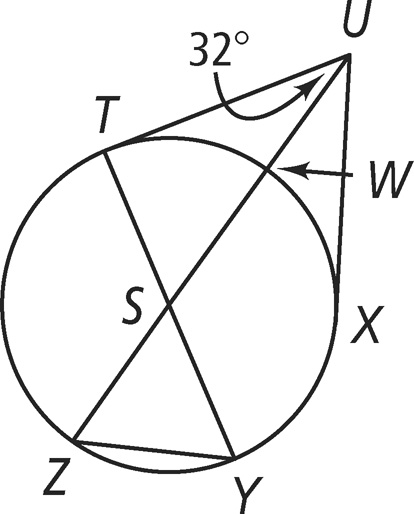
**Chapter Review**

**Algebra Assume that lines that appear to be tangent are tangent. *O* is the center of each circle. What is the value of *x?***

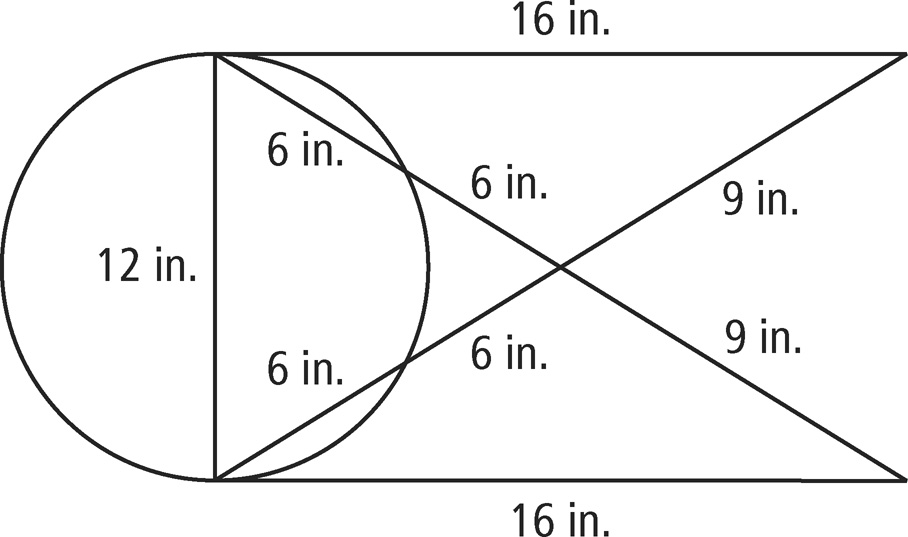
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| --- | --- | --- |
| **1.** | **2.** |  |

**In each circle, what is the value of *x* to the nearest tenth?**

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| **3.** |  | **4.** |

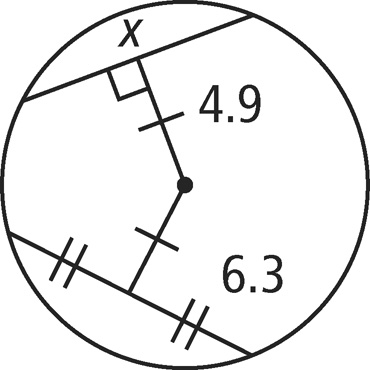
**5. ****and ******are diameters of *S.* ******and ******are tangents of *S.* What is *m*∠*SYZ?*

**6.** The peak of Mt. Everest is about 8850 m above sea level. About how many kilometers is it from the peak of Mt. Everest to the horizon if the Earth’s radius is about 6400 km? Draw a diagram to help you solve the problem.

**7.** The design of the banner at the right inclaaaudes a circle with a 12-in. diameter. Using the measurements given in the diagram, explain whether the lines shown are tdssddddddd0ddangents to the circle.

***If*  *then w*hat can you conclude?**

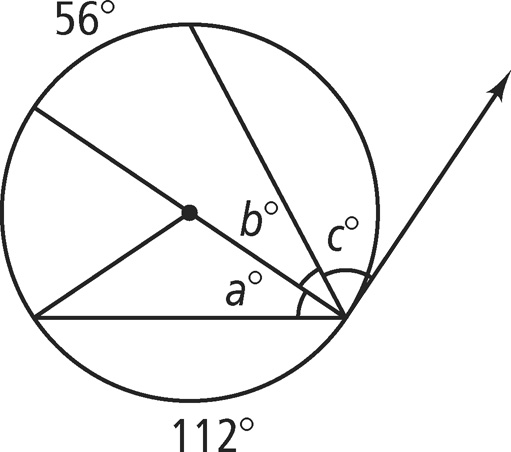
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| **8.** | **9 .** |

**10. What is the value of “x”?**

**Find the value of each variable. For each circle, the dot represents the center.**

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| **11.** | **12.** | **13.** |

**14. Find the value of each variable. For each circle, the dot represents the center.**

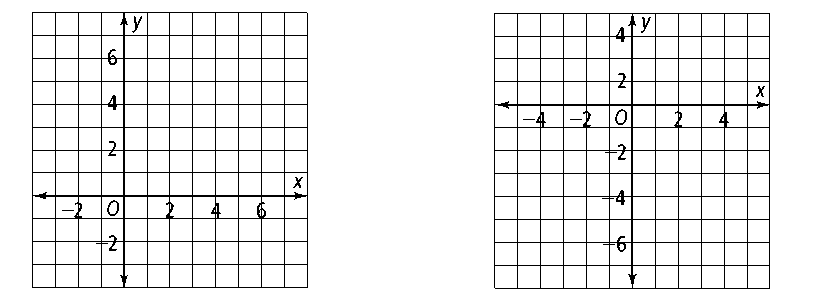
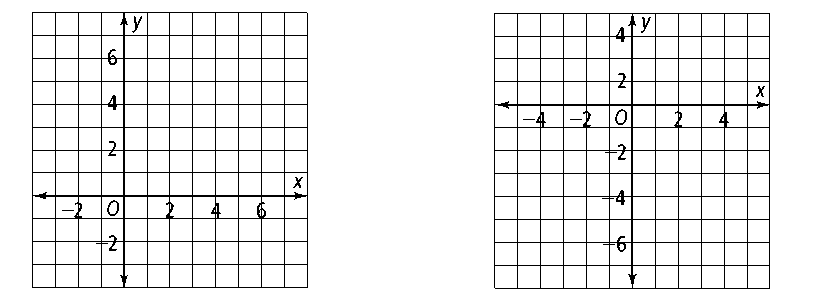


**Find the value of *x* for 15-18**

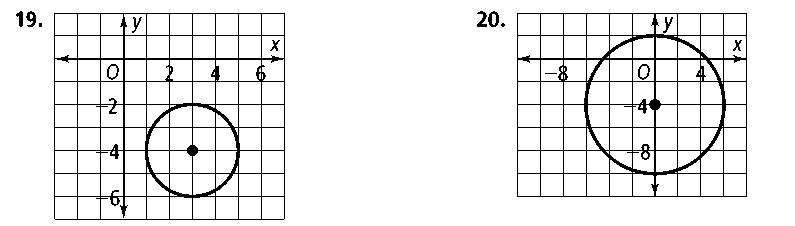
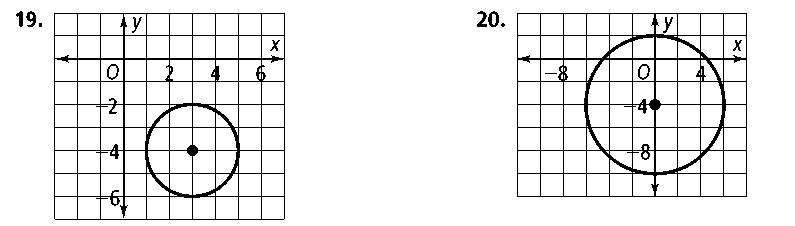
|  |  |  |
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| **15.** |  | **16.** |
| **17.** |  | **18.** |

**Find the center and radius of each circle. Then graph the circle.**

**18.** (*x*  2)2 + (*y*  3)2 = 9 **19.** (*x*  1)2 + (*y +* 5)2 = 4

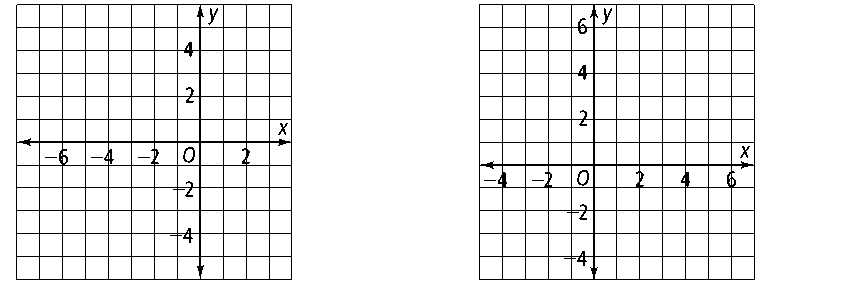
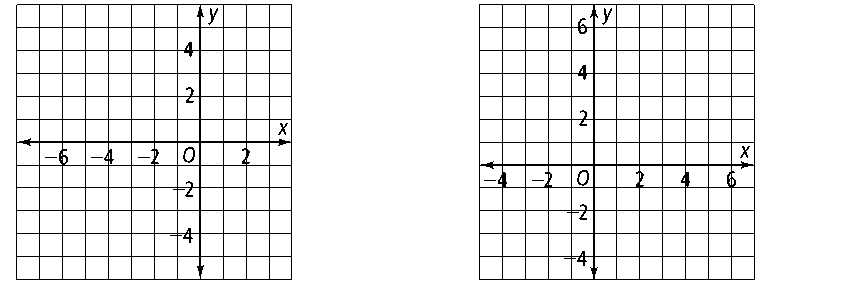


**Write the standard equation of each circle.**

**20. 21.**

**Sketch the graphs of each equation. Then, find all points of intersection of each pair of graphs.**

**23.** (*x* + 2)2 + *y*2 = 9 **24.** (*x*  1)2 + (*y*  1)2 = 13  
 *y = x +* 1 *y =* *x +* 1



**Vocabulary. Write the definition of each term.**

**25. Point of tangency**

**26. Tangent line**

**27. Chord**

**28. Inscribed angle**

**29. Intercepted arc**

**30. Coordinate point**

**31. Pythagorean equation**

**32. Equation of a circle with center at point (h,k) and radius r.**